



#### RETURN SERVICE REQUESTED

Erie National Wildlife Refuge 11296 Wood Duck Lane Guys Mills, PA 16327

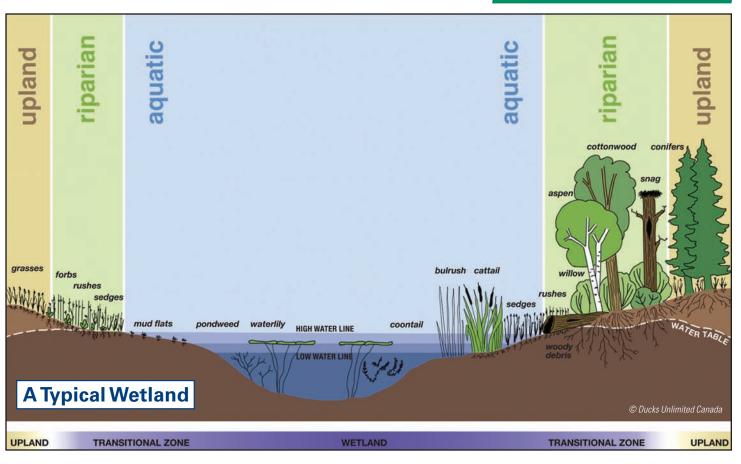


### U.S. Fish & Wildlife Service

# **Erie National Wildlife Refuge**

March 2009 Vol. 2 No. 2

# INSIDErie



#### The Wonders of Wetlands

In years with heavy rains or a quick spring thaw, it's hard to find dry ground on the Seneca Division of Erie National Wildlife Refuge. Muddy Creek, a tributary of French Creek, has been known to overflow its banks, covering surrounding riparian areas.

When storm waters spread and linger on Erie's 5,700 acres of wetlands, it's good news for communities and agricultural lands downstream. While there is no flood control data specific to Erie, the U.S. Environmental Protection Agency (EPA) estimates that an acre of wetland can store up to 1.5 million gallons of floodwater, and then slowly release it into streams, rivers and aquifers.

Wetlands are lands where the ground is saturated with water either part or all of the growing season. Along with controlling floodwaters, wetlands purify water by absorbing excess nutrients, sediment and other pollutants before they reach rivers and lakes. Water that collects on Erie is naturally filtered by wetland vegetation and soil before it enters Seneca's streams and eventually French Creek.

Nearly three-quarters of Erie's lands are wetlands, but not all are easy to identify. Emergent wetlands are probably most familiar, with their soft-stemmed marsh vegetation like cattails and sedges. But

forests can be wetlands too. Erie has thousands of acres of forested wetlands dominated by black ash, red and silver maples and sycamore trees. "Some riparian wetland forests are seasonally flooded; you might not readily know it was a wetland, if you were just looking for water," says Norma Kline, refuge biologist.

Like forested wetlands, shrub wetlands — dominated by bush-like vegetation — are only ocassionally water-covered. Erie harbors a globally rare type of shrub wetland, called the Western Allegheny Tall (story continued on page 3)

# Comprehensive Conservation Plan Update

Where We've Been...

We continue to chip away at the tasks associated with developing a comprehensive conservation plan.

Work has been completed on a Visitor Services
Summary and Self-Assessment. These two lengthy
documents have been prepared in advance of a site-visit later
this month from a diverse group of Visitor Services Specialists from around
the Fish and Wildlife Service's Northeast Region. These additional experts in
public activities on refuges will help us to fine-tune our Visitor Services goals
and objectives, and inspire new ways for the refuge to be a resource for the
community even while staff numbers are minimal.

#### Where We're Going...

Past

As this newsletter goes to press, a meeting with our State conservation partners is in the works. The meeting is intended to begin discussions about objectives and management strategies for each of our goals. More information about our progress will be forthcoming in the May issue of "INSIDErie".

## **Get Involved!**

Are you wild about nature? Have you ever considered volunteering at a national wildlife refuge? Erie NWR is looking for people to join their active volunteer program. Current needs include assisting with biological and maintenance projects, greeting visitors, creating and/or leading educational activities, or helping in the refuge office. You can volunteer full-time, seasonally, just a few hours a week or month, or help out with a special event such as the upcoming Heritage Festival.

Do you have some time you're willing to share?



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#### The Wonders of Wetlands (cont.)

Shrub Rich Fen. The wetland has many state-listed rare plants such as drooping bluegrass, thin-leaved cottongrass, slender spikerush and swampfly honeysuckle found in few wetland communities.

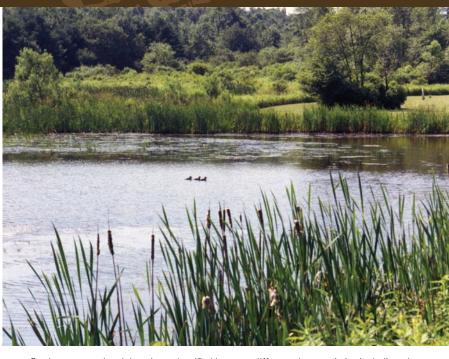
Wetlands come in many variations — from salt marshes near the ocean, to prairie potholes that fill with rainwater and melted snow in the Midwest, to the ponds, marshes and shallow streams that can be found across the country.

Wetlands are hotbeds of biodiversity. The EPA estimates that 31 percent of the plant species in the conterminous United States dwell on wetlands, although wetlands make up only about 5 percent of the land area.

"Many of the U.S. breeding bird populations — like ducks, geese, wading birds, and song birds — feed, nest and raise their young in wetlands," says Refuge Manager Tom Roster. "Erie National Wildlife Refuge has been designated an 'Important Bird Area' by the National Audubon Society because of the diverse wetland types and the multitude of species it supports."



Streams are an important part of the wetland system at Erie NWR. When flooding occurs, nearby wetlands help to filter and slow the water, while the water itself nurtures those very wetlands.



Freshwater marshes (above) are classified by many different characteristics including plants, hydrology, water chemistry, topography, human activities, and other factors.

Here are just few examples of how wildlife depend on Erie's wetlands:

- Wetland plants add oxygen to the water for fish, and help to shelter fish eggs and hatchlings from predators and currents.
- American bald eagles nest next to marshes and ponds on Erie's Seneca and Sugar Lake Divisions, and rely on healthy fish populations for food.
- River otters have been spotted on both divisions of the refuge. They live along creeks and marshes and eat aquatic creatures like fish, amphibians, turtles and shellfish.
- Erie is the only national wildlife refuge that hosts the endangered northern riffleshell and clubshell mussels.
- Black bears dine on the berries and roots of wetland plants.

More than half of America's original wetlands have been destroyed — drained and converted to farmland, filled for housing developments and industrial facilities, or used to dispose of household and industrial waste, according to the EPA. That makes existing wetlands even more important to both wildlife and humans.

"Wetlands benefit people in more than just how they function; they provide resources for our economy as well as recreational enjoyment," Roster adds. "Wetlands provide opportunity for individuals to trap beaver, muskrat and mink. Others just like to spend time afield enjoying the excitement of fishing, waterfowl hunting, bird watching or photographing wildlife. At Erie, there is a long tradition of these uses."

Come and spend some time in Erie's wetlands for yourself! All five of Erie's hiking trails pass through wetlands, and offer an opportunity to observe the plants and wildlife that flourish there (For trail descriptions and directions, go to www.fws.gov/northeast/erie).



A forested wetland (above) provides habitat for a diverse mix of plant and animal species such as black ash (trees) and wood ducks.